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RAW SEQUENCE LISTING

DATE: 09/20/2004

PATENT APPLICATION: US/10/796,304

TIME: 16:06:10

Input Set : A:\US Utility 050229-0429 Sequence Listing.txt

Output Set: N:\CRF4\09202004\J796304.raw

3 <110> APPLICANT: University of Kentucky Research Foundation
 4 Rohr, Jorgen
 6 <120> TITLE OF INVENTION: Derivatives of Mithramycin and Methods of Making and Uses
 Thereof
 8 <130> FILE REFERENCE: 050229-0429
 10 <140> CURRENT APPLICATION NUMBER: 10/796,304
 11 <141> CURRENT FILING DATE: 2004-03-10
 13 <150> PRIOR APPLICATION NUMBER: 60/548,175
 14 <151> PRIOR FILING DATE: 2004-03-01
 16 <160> NUMBER OF SEQ ID NOS: 1
 18 <170> SOFTWARE: PatentIn version 3.2
 20 <210> SEQ ID NO: 1
 21 <211> LENGTH: 5975
 22 <212> TYPE: DNA
 23 <213> ORGANISM: Streptomyces argillaceus
 25 <400> SEQUENCE: 1

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30	aggaacctgg	gccgctgttc	gggggggaga	tgagcgtggt	cgtcggggac	gcactggacg	180
32	gtcggggcca	gctcgatgag	gtcgacgtag	cccggttccg	ggtgggcgcg	cgccaggacg	240
34	tggaggacgc	cgctgatccg	cttgccagg	aacgccacca	ccccggtgcc	gcgcgggctg	300
36	agcagcggct	gggtccaccc	cttgacttcg	cggttgcccg	cctccacaga	cacggcgacg	360
38	atcgcgaaat	gccgtccact	ggtgtggcgt	atctcgctcg	tgtcgcgagc	ccagccgtcc	420
40	acggaggtca	gcgggacgag	ctgcgcggcg	acctcgctgc	gcgccctgag	cccgttgaac	480
42	cagcgcagca	gctcgggcag	ggtgtgcgcg	gcgggggctt	gcgcggacag	ggaggcggtc	540
44	agggcggcca	cggccgcccc	gcgggaaccg	tcggctgtga	ctccctcgag	ggaaccgtcc	600
46	ggcggggcga	cggggaggca	ggccaggacc	gtccgagtgt	ccatgttgac	caggtccggg	660
48	acgccgagca	gccggcggac	ctgaccgagg	gtcagccagc	ggtagtcctc	gtgctcgggc	720
50	acgtcgccga	cggcctcgac	gacgagattg	cggttgcgtt	tgcggaagaa	ccaggaaccg	780
52	tgtcggact	ggagcacgtc	gaccagcggc	cggcccttgc	cgggggtccgt	gaagtactcc	840
54	aggtaccgca	cggcgctgcc	ctcgtgcacg	cccgtgtagt	tgtcgggggt	ggcctgcacc	900
56	gtgggcgaca	actggagtcc	ctcggcggtt	ccgggctcgg	ccttcgcctg	catcaggcag	960
58	tgcaggacac	cgtcgaactc	cttgaccagg	atgccgagga	aaccacttc	cggctggtgc	1020
60	atgatcggct	gggaccagga	gacggggctc	gggccctcgg	agcagagccc	cagcccttcg	1080
62	acggtgaaga	agcggccgct	gtcgtgcgcc	agattcccgg	tgaccgggtg	gaagccccag	1140
64	cgctggagct	cggcgaaggg	gatgcgcctc	acgtccatcc	ggatggcctt	gcggcgctcc	1200
66	tccaaccagt	cgtggacacc	accaggggac	agcagccgcg	tgtcggccgc	cgccgattcg	1260
68	gcgatgcgcc	tcagatccgg	cgcgteggag	ccgtccgggg	ggaccgctgg	atgctttctg	1320
70	ctcatgatcg	cttgagtcac	ggatgtctct	cccatcgagc	gcacggcagc	cgcgctcggg	1380
72	ccaccgtcgg	caccaggtct	ggagtgcgcg	tcagggcccg	gtcggtcggg	accgggcgga	1440
74	cggcgggttc	gtcagggctc	gagccgcctt	cgatcagggc	ggccgaacgt	ggtcgccgtg	1500
76	gagttccgaa	gccttgcccg	aagtggcctt	tcagtgaagt	agatcggtga	cggcaacctg	1560
78	ctgtaccgcg	aggacgacac	ccccgacgag	gtggttctct	cctcgatcag	agcggccctt	1620
80	gacgcggggg	tgacgacctt	cgacaccgcg	gacgtctacg	gcattgttcc	ctccgagagc	1680

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82	ctgctgggcc	gggcactggc	cggcacgccc	cgcaagagc	tggctgctgtg	caccaaggtg	1740
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86	tccgtcgacg	gctcgctgcg	ccgtctgcgc	gtcgaccaca	tcgacgtcta	caccgcgcac	1860
88	cgctacgacc	cggcgactcc	gctggaggag	ctgatgtgga	ccttctccga	cctggtagcg	1920
90	gccgggaaga	tcctctacgt	cggcatgtcg	gaatggccc	tggagcggat	cgccgagggc	1980
92	gccgggatag	gtgcgcggct	cgggtgtgcc	gtgatctgtc	acatgcccc	ctactcgatg	2040
94	ctgtggcggg	cgccggaggc	cgaggtgatc	cccgcctgcc	gtgacctggg	catcgccag	2100
96	atcgggagct	cgaattcgaa	gcttctgcag	ctcacggtaa	ctgatgccgt	atttgcahta	2160
98	ccagcgtacg	gcccacagaa	tgatgtcacg	ctgaaaatgc	cggcctttga	atgggttcat	2220
100	gtgcagctcc	atcagcaaaa	ggggatgata	agtttatcac	caccgactat	ttgcaacagt	2280
102	gccgttgatc	gtgctatgat	cgactgatgt	catcagcggg	ggagtgcaat	gtcgtgcaat	2340
104	acgaatggcg	aaaagccgag	ctcatcggtc	agcttctcaa	ccttgggggt	acccccggcg	2400
106	gtgtgctgct	ggtccacagc	tccttccgta	gcgtccggcc	cctcgaagat	gggccacttg	2460
108	gactgatcga	ggccctgcgt	gctgcgctgg	gtccggagg	gacgctcgtc	atgccctctg	2520
110	ggtcagggtc	ggacgacgag	ccgttcgatc	gtgccacgtc	gcccgttaca	ccggaccttg	2580
112	gagttgtctc	tgacacattc	tggcgcctgc	caaagtataa	gcgcagcgcc	catccatttg	2640
114	cctttgccc	agcggggcca	caggcagagc	agatcatctc	tgatccattg	cccctgccac	2700
116	ctcactcgcc	tgaagcccg	gtcgcctgtg	tccatgaact	cgatgggcag	gtacttctcc	2760
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122	atctcgagaa	tgaccactgc	tgtgagcgct	ttgccttggc	ggacaggtgg	ctcaaggaga	2940
124	agagccttca	gaaggaaggt	ccagtcggtc	atgcctttgc	tcggttgatc	cgtccccgcg	3000
126	acattgtggc	gacagccctg	ggtcaactgg	gccgagatcc	gttgatcttc	ctgcatccgc	3060
128	cagagggcgg	gatgcgaaga	atgcgatgcc	gctcgccagt	cgattggctg	agctcatgag	3120
130	cggagaacga	gatgacgttg	gaggggcaag	gtcgcgctga	ttgctggggc	aacacgtgga	3180
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148	ggcgccccgc	ccccggccgg	gtcccggggc	acggcaccca	aaggtggccg	ggccccgttg	3720
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158	gtgcacgacg	aggagtagcc	cccggggcgg	gccggtggag	gcggatgcga	cgccgttcgt	4020
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170	tcccactgga	gcggcggcgc	tggccgcggg	gcactaggtg	cgggtcgcg	gcgcgcccgc	4380
172	gctgatgccc	gtcgtgaccg	cgtccggcct	ccccgggata	ccggtcggcc	aggacgtgga	4440
174	ccttgctccc	ctgtccaacg	accgcagccg	ggccgcctgg	cacgttcagg	accgctggcc	4500
176	cgacgactgg	cccgtccgtc	cggaactcct	cgacgacgag	cagttcgcgc	tgatcgagaa	4560
178	cctgggacgg	atgcagacgg	tcattggcctc	ggccatgctc	gacgacctgc	tgagcttcgc	4620

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180	ccggtactgg	cgccccgacc	tggtggtgca	cgacgcgcgc	agcctcgccg	gccccgtggt	4680
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186	ggcgggaacg	acggtgcgga	ccgagcccag	tgcctggatc	gaccccagtg	cccccgcat	4860
188	ccggtacccg	gccggaccga	cctgccgtca	gatgcggtac	gtgccctaca	acggcccggg	4920
190	cctgctgccg	gactggctgc	gccgggaacc	gtcgggcagc	cggtctctgc	tcacgtgggg	4980
192	cgccacctcc	atggccctgc	gcggcggcac	cgtcgtcgaa	ctcgtacgcc	agtgcgtgga	5040
194	agccgcgcgc	gaggtggccg	acgaggtcgt	cgtcgcggtg	accgaacaga	ccgcgcgggc	5100
196	gctggaggac	acgcgcgtgc	cggaccacgc	acgcgtcgcg	gtcggattgc	cgctgcacct	5160
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204	ccgggaggga	gtgctgctgc	tgcgcgccga	gatggaccgt	ctcctatcgg	accccgaca	5400
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222	cctcgccccg	acctggaaac	cggacctggt	gctcgccgac	accatgtgcc	cgcggggcct	5940
224	cgtcgcgcga	caggaactcg	gcgtgcccgg	gatcc			5975

VERIFICATION SUMMARY

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